Lockout Timer
TL Series
Timing Module

- Lockout Delay--Prevents Rapid Recycling of a Compressor
- Optional 1 s Delay On Make Prevents Contactor Chatter
- Totally Solid State and Encapsulated
- 24 V AC ... 230 V AC in 3 Ranges
- Eliminates Nuisance Service Calls Due to Blown Fuse or Tripped Breakers

Description

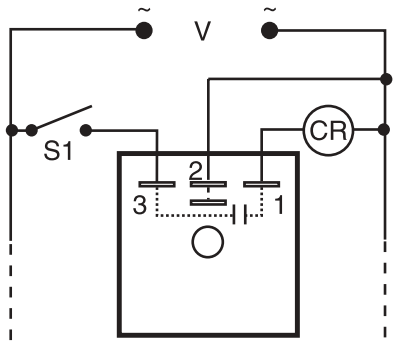
Provides protection against premature cycling of a compressor. At the end of each operation, or whenever power is lost, a lock delay is initiated which prevents restarting of the compressor. Compressor relay chatter due to thermostat bounce is eliminated by use of optional one second delay-on-make. The TL Series should not be used with cooling anticipator resistors or solid state switches. (See the TA Series).

Operation

Lockout: On initial closure of S1, the compressor relay energizes immediately (or after an optional 1 s delay). When the S1 opens or input voltage is interrupted, the output opens and remains open for the lockout time delay. During this lockout/time delay period, the compressor relay cannot be re-energized.

Reset: The lockout time delay cannot be reset. After the time delay is completed, the unit automatically resets.

- Approvals:



V = Voltage S1 = Initiate Switch
CR = Compressor or Control Relay

Ordering Table

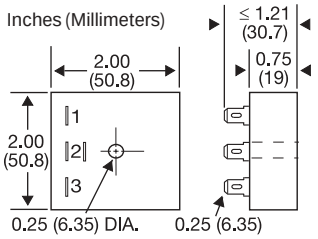
TL	X	X	X
Series	**Input**	**Lockout Time**	**Delay On Make**
	24 A - 24 V AC	**2** m	(Blank) No delay
	120 A - 120 V AC	**3** m	**T** - 1 s
	230 A - 230 V AC	**5** m	

Example P/N: **TL24A2T**

Technical Data

Input	
Voltage	24, 120, or 230 V AC, 50 ... 60 Hz
Tolerance	+/-20%
Output	
Minimum Load Current	40 mA
Maximum Load Current	1 A 24 V AC; 0.5 A 120 & 230 V AC
Inrush Current	10 A at 60°C
Voltage Drop	24 V AC – 2.5 V at 1 A
	120 & 230 V AC – 4.2 V at 0.5 A
Time Delay	
Initiate Time	≅ 8 ms
Lockout Time*	Fixed 2, 3, or 5 m
Tolerance	-15% ... +35%
Option	1 s Delay on make eliminates contactor chatter due to thermostat bounce
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Mechanical	
Mounting	Surface mount with one #10 (M5 x 0.8) screw
Package	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating Temperature	-40°C ... +70°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

*Power must be applied for at least 15 s to achieve a full lockout delay. Less than 15 s will result in proportionally shorter delay periods.
NOTE: Cooling anticipator resistor or leakage may cause erratic operation. See TA Series for use with 24 V AC systems that include anticipator resistors or use solid state switches.



Accessories

Female quick connect
P/N: P1015-64 (AWG 14/16)

Quick connect to screw adaptor
P/N: P1015-18

Mounting bracket
P/N: P1023-6

DIN rail P/Ns:
17322005 (Steel)
C103PM (Al)

DIN rail adaptor
P/N: P1023-20

See accessory pages at the end of this section.